

36. The passive safety of claim 33 wherein a detachable backstrap provides alignment to the blocking means.

37. The passive safety of claim 33 wherein a positive stop means limits the maximum downward position of the blocking means.

38. The passive safety of claim 37 wherein said positive stop means is a mandrel for a torsion spring.

39. In a handgun having a longitudinally slidable trigger, a trigger mechanism comprising a trigger return spring, (said trigger return spring being a torsion spring which effects translation and rotation of a triggerbar.

40. The trigger mechanism of claim 39 wherein said trigger return spring acts upon said trigger indirectly via said triggerbar.

Remarks

The last Office Action did not acknowledge receipt of applicant's Information Disclosure Statement and 8 related references. In telephone message on 1998 August 25, Examiner stated that Information Disclosure Statement and references had subsequently been located and considered. If that is not the case, applicant will resubmit Information Disclosure Statement and references upon request.

Applicant has amended the specification as requested by the Examiner.

Applicant has rewritten all independent claims to define the invention more particularly and distinctly so as to overcome the Examiner's rejections and more clearly define the invention patentably over the prior art.

The Rejection of Independent Claims 1 and 13 On Pons et al Is Overcome

The last O.A. rejected independent claims 1 and 13 on Pons et al under Section 102(a). Claims 1 and 13 have been rewritten as new claims 21 and 33 to more clearly define patentably over this reference. Applicant requests reconsideration of this rejection, as now applicable to claims 21 and 33 for the following reason.

(1) Claims 21 and 33 state that the firing element blocking means is "distinct from a sear." This language distinguishes over Pons et al under Section 102 because the firing element blocking means of Pons et al is not distinct from a sear. The sear, and only the sear, serves to block hammer rotation in this reference.

The Rejection of Dependent Claims 2, 3, 6, 7, 14, and 17 On Pons et al Is Overcome

Dependent claims 2, 3, 6, 7, 14, and 17 were rejected on Pons et al under Section 102(a). These claims have been renumbered as claims 22, 23, 26, 27, 34, and 37. Applicant requests reconsideration of this rejection, as now applicable to the renumbered claims for the following reasons.

(1) The independent claims upon which these claims are dependent have been rewritten to more clearly define patentably over this reference.

(2) With regard to claim 2, now claim 22, the reference cited does not show means connecting a trigger to blocking means while also connecting said trigger to a triggerbar. The only connecting means shown is in fact a triggerbar and nothing but a triggerbar. Neither means performs an additional function distinct from that of a triggerbar.

(3) With regard to claim 3, now claim 23, the blocking means shown does not provide alignment to a triggerbar. In fact, the exact opposite is true. The triggerbar supports the blocking means. The reference makes this clear in column 3, lines 17-20. The sear (blocking means) is rotatably mounted on a shaft which is supported by the linking bar (triggerbar).

The Rejection of Independent Claim 8 On Maillard Is Overcome

Independent claim 8 was rejected on Maillard under Section 102(b). Claim 8 has been rewritten as new claim 28 to more clearly define patentably over this reference. Applicant requests reconsideration of this rejection, as now applicable to claim 28 for the following reasons.

(1) Claim 28 states that the firing element blocking means is "distinct from a sear." This language distinguishes over Maillard under Section 102 because the firing element blocking means of Maillard is not distinct from a sear. The sear, and only the sear, serves to block forward bolt travel in this reference.

(2) Applicant submits that this reference does not show any component which could rightfully be called a triggerbar. If this reference does show a triggerbar however, it cannot by definition also show connecting means distinct from said triggerbar which connect said trigger to means for blocking a firing element. The linkages between trigger and sear are all interdependent. The connecting means must incorporate and rely upon the triggerbar and therefore is not distinct from it.

The Rejection of Dependent Claims 9 and 12 On Maillard Is Overcome

Dependent claims 9 and 12 were rejected on Maillard under Section 102(b). These claims have been renumbered as claims 29 and 32. Applicant requests reconsideration of this rejection, as now applicable to the renumbered claims for the following reasons.

(1) The independent claim upon which these claims are dependent has been rewritten to more clearly define patentably over this reference.

(2) With regard to claim 9, now claim 29, no trigger is shown in this reference; thus, the method of connecting trigger to presumed triggerbar is unspecified and unknown.

Claims Are Unobvious - Unsuggested Modification and Unexpected Results

Independent claim 19 was rejected on Pons et al under Section 103(a). Claim 19 has been rewritten as new claim 39 and now recites translation and rotation of a triggerbar. This claim is submitted to be of patentable merit under Section 103 and applicant requests reconsideration of this rejection, as now applicable to claim 39 for the following reasons.

(1) Pons et al does not suggest using a torsion type trigger return spring for both the translation and rotation of a triggerbar. The triggerbar shown in Pons et al is not even capable of rotation. Since the triggerbar shown in Pons et al is only capable of translation, only the horizontal force component of the trigger return spring serves a useful purpose. The vertical force component of the trigger return spring shown in Pons et al is actually detrimental to the function of the mechanism, as it increases the frictional force which resists triggerbar motion. A trigger return spring providing a simple axial force, such as a compression spring, would have better met the needs of Pons et al, instead of a torsion spring which needlessly increases friction. A person with ordinary skill in the art could see this disadvantage. In this way, Pons et al actually teaches away from applicant's invention as claimed and certainly does not suggest any modification to meet this claim.

(2) Applicant's invention provides new and unexpected advantages. The use of a torsion type trigger return spring allows a single spring to do the work of two springs. Typical trigger mechanisms which use a longitudinally slidable trigger along with a translating and rotating triggerbar require the use of two return springs. One spring is used for translation of the trigger and triggerbar. A second spring is used for triggerbar rotation. Applicant's use of a torsion type trigger return spring provides the force required for translation and rotation with a single spring and thereby reduces firearm complexity, firearm size, and manufacturing cost.

Dependent claim 20 was rejected on Pons et al under Section 103(a). Claim 20 has been rewritten as new claim 40. Applicant requests reconsideration of this rejection, as now applicable to claim 40, because independent claim 39, on which claim 40 is dependent, has been rewritten to more clearly define patentably over this reference and for the other reasons offered above.

Non-Applied References Do Not Show The Invention

Applicant has reviewed the non-applied references. These references do not show the invention or render it obvious.

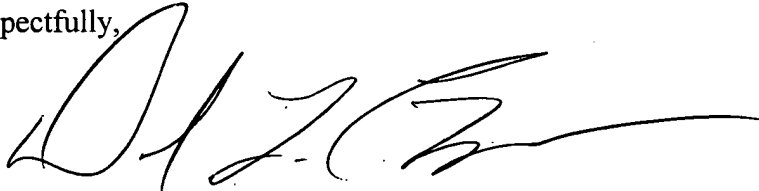
Conclusion

For all the above reasons, applicant submits that the specification and claims are now in proper form and that the claims all define patentably over the prior art. Therefore, applicant submits that this application is now in condition for allowance, which action is respectfully requested.

Conditional Request for Constructive Assistance

If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. 706.03 (d) and 707.07 (j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Very respectfully,



Applicant: Daniel L. Chapman

P.O. Box 710316
Santee, CA 92072-0316
(619) 448-5510

Certificate of Mailing

I hereby certify that this correspondence, and attachments, if any, will be deposited with the United States Postal Service as first class mail with proper postage affixed in an envelope addressed to : "Assistant Commissioner for Patents, Washington, DC 20231" on the date below.

Date: 1998 December 18

Daniel L. Chapman, Applicant

